

REMARKS/ARGUMENTS

Claim Amendments

Claim 1 has been cancelled. Claims 4 to 7 have been amended to change their dependency. A new claim 8 has been added as supported, for example, by paragraph 13 of the application as filed. Claims 2-8 are pending. The Applicant submits that no new matter has been added.

Claim Objections

Claims 5 to 7 were objected to for depending on multiple dependent claims. Claims 5 to 7 have been amended so that they no longer depend on another multiple dependent claim.

Claim Rejections – 35 USC 112

Claims 1-7 were rejected for the language, "thinner than the spacers appropriate for use in a reverse osmosis unit which is fed directly with water to be treated". The Applicant does not admit that the rejection of claim 1 under 35 USC 112 was proper but, in any event, the present cancellation of claim 1 moots the rejection. Claims 2 and 3 do not have the language mentioned in the Office Action. Claims 4 to 7 as amended, do not depend on claim 1. Accordingly, the Applicant submits that the claims satisfy 35 USC 112.

Claim Rejections – 35 USC 102

Claims 1-7 were rejected as being anticipated by Al-Samadi US 5,501,798 (US '798). The Applicant respectfully traverses this rejection.

The Office Action refers to Figure 3 of US '798 and a working example having a Filmtec FT-30 RO membrane. However, the working example is made according to "a set up substantially as shown in Figure 1" (column 8, lines 24-25). The set up of Figure 1 of US '798 does not have an MF or UF membrane filter providing pretreatment of feed water for a downstream reverse osmosis membrane and so does not comply with the

Applicant's claims. Further, the Office Action provides no evidence as to the thickness of the spacers in a FT-30 SW 2540 module. Accordingly, these arguments in the Office Action fail to raise a prima facie case of anticipation.

The Office Action acknowledges that US '798 does not teach what specific feed spacers are to be used in a membrane module. US '798 in fact says nothing at all about spacers. The Office Action states that the use of a spacer in the range claimed is inherent or implied in the reference, or is in a commonly used range, as evidenced by Johnson et al. US 6,881,336 (US '336) column 6, line 33 to column 7, line 35. The Applicant submits that these arguments fail to establish a prima facie case of anticipation.

An anticipation rejection of claim 2 based on US '798 would require that it be inherent in US '798 that a spacer having a thickness in the claimed range was used in a device having the claimed configuration. The Office Action alleges that the use of spacers in the claimed range might be implied in US '798, or in a common range. These statements, even if true (which the Applicant denies), would not be sufficient to support an anticipation rejection. Anticipation, when a reference admittedly does not include a claim element, requires that the missing element be necessarily present in the reference (MPEP 2131.01 III). US '336 merely discusses various spacer thicknesses in contexts not linked in any way to US '789 and so completely fails to make the claimed range of spacer thickness necessarily present in US '336.

Further, the Office Action states that "...spacer thickness from 350 microns – 700 micron are discussed" in US '336. However, there is no discussion of such a range of thickness in US '336 but rather a mention of one particular spacer, of unknown use, having a thickness of 350 microns, and another particular spacer, by a different manufacturer and also of unknown use, of 700 micron thickness. Both of these examples are outside of the claims. Another section of US '336 states that commercial NF and RO elements referred to two particular publications may use a spacer with an average thickness of between 0.5 and 2 mm. This range includes values outside of the


claims. Accordingly, even if the RO module in US '798 was as described in those two particular publications, which the Office Action has not proven, it is still not necessarily true that the spacer in US '798 must be within the claimed range. Accordingly, the Office Action does not establish a prima facie case of anticipation of claim 2.

Claims 3 to 8 add additional elements that are not disclosed or inherent in US '798 in combination with the elements of claim 2. Further, regarding claim 4, the only relevant reference in the Office Action is to the working example in US '798 which, as discussed above, does not relate to an apparatus having an MF or UF membrane filter providing pretreatment of feedwater for a downstream reverse osmosis unit. Regarding claims 6-8, the cited references do not say anything about what spacer thickness is used when treating salt water or water taken from an ocean.

For the reasons, above, the Applicants submit that the claims are allowable.

Respectfully submitted,

Customer No.
27901



Andrew Alexander
Attorney for Applicant
Reg. No. 27690
Telephone (724) 337-1566